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# Note on **Labeo Quathlambae** Barnard, 1938

There are two important reasons why this note on **Labeo quathlambae** is being published. The first is that the species is known only from the type series collected in a tributary of the upper Umkomazana River, Umkomaas River system, in 1938, and has been found in no other river system. It was apparently confined ecologically to the cold waters of this Drakensberg stream which has been stocked with **Salmo trutta**, the exotic brown trout. The failure of recent collecting to bring to light any specimens of **quathlambae** might be due to extermination by this introduced predator (Crass, 1964).

The second important reason is that **quathlambae** is not a **Labeo** and, of more importance still, is quite unique in that it is not closely related to any known African Cyprinid. In describing **quathlambae** Barnard noted some curious features about this species which created some doubt about whether it should be assigned to the genus **Labeo** or **Barbus**. As recent research indicated that **quathlambae**, judged by its description, could not be fitted to a key for the identification of the **Labeo** it was decided to examine type material.

By courtesy of the Director of the South African Museum two of the syntypes, S. A. M. 19018, were made available for examination, the one 80 mm. standard length (fork length 90 mm.) and the other 81 mm. standard length (fork length 91 mm.). Both were found to be ovigerous females, the former showing remarkable agreement with the illustration of **quathlambae** in Barnard's paper. On examination of the specimens it was found that, in addition to the features such as fin-formula, position of the dorsal fin relative to the ventrals, and the few short, stout gill rakers previously noted by Barnard, the shape and position of the mouth, as well as the character of the digestive tract and the pharyngeal teeth indicated that **quathlambae** could not be assigned to the genus **Labeo**.

As regards the shape and position of the mouth of **quathlambae**, it was possible to compare this species directly with other **Labeo** from the rivers of southern Africa. This was carried out in accordance with the general characters and functional morphology of the feeding mechanisms of some African Cyprinidae described in such detail by Matthes (1963). The intestine of a **Labeo** is extremely long, the ratio total intestine length divided by the standard length of the fish being as much as 14-21; this same ratio for **quathlambae** was found to be less than 1. The intestine of **quathlambae** is extremely short and resembles that of a predatory **Barbus**. The pharyngeal teeth of Labeo are homodent and placed in three rows, the formula being 2-3;3-4;5 - 5;4-3;3-2. The crowns, which lie close together, tend to be flattened. Those of **quathlambae**, both in character, being distinctly pointed and hooked, and formula, 2-3;4-4;3-2, were found to resemble those of a **Barilius** and not a **Barbus**.

As the presence of this unique Cyprinid, isolated in a Drakensburg stream and apparently unrelated to any known African Cyprinid, is a problem of considerable interest requiring an explanation, the Director of the South African Museum has very kindly forwarded further material to Dr. P. H. Greenwood of the British Museum (Natural History) for examination and comparison with Cyprinid material at his disposal.

## REFERENCES

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